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OM protein - protein search, using sw model

Run on:

January 3, 2002, 23:06:45; Search time 23.77 Seconds (without alignments)
1423.712 Million cell updates/sec US-09-497-8226-19 4912 1 MEVQLGLGRVYPRPESKTYR.....SVQVPKILSGKVKPIYFHTQ 923 Title: Perfect score:

Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

100059 seqs, 36664827 residues Searched:

100059 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

SwissProt\39:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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RL	Proc. Natl. Acad. Sci. U.S.A. 86:327-331(1989).
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Faber P.W., van Rooij H.C.J., Geurts van Kessel A., Voorhorst M.M.,
Mulder E., Brinkmann A.O.;
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MEDLINE-94059770; PubMed=8240973;
Sultan C., Lumbroso S., Poujol N., Belon C., Boudon C.,
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J. Pediatr. 152 Suppl. 2:S62-S(9(1993)
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MEDLINE-88178111; PubMed=3353726;
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MEDLINE=93339360; PubMed=8339746;
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MEDLINE=91155943; PubMed=2293020;
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Science 240:324-326(1988).
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McPhaul M.J., Marcelli M., Tilley W.D., Griffin J.E.,
Isidro-Gutherrez R.F., Wilson J.D.;
"Molecular basis of androgen resistance in a family with a qualitative
abnormality of the androgen receptor and responsive to high-dose
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VARIANTS CAIS ASN-695 AND HIS-695, AND SEQUENCE OF 629-723 FROM N.A. MEDLINE-92131007; PubMed-175137; Ris-Stalpers C., Trifiro M.A., Kuiper G.G.J.M., Jenster G., Romalo G., Sai T., van Rooij H.C.J., Kaufman M., Rosenfield R.L., Liao S., Schweikert H.-U., Trapman J., Pinsky L., Brinkmann A.O.; Schweikert H.-U., Trapman J., Pinsky L., Brinkmann A.O.; "Substitution of asparite acid-686 by histidine or asparagine in the human androgen receptor leads to a functionally inactive protein with altered hormone-binding characteristics.";
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Nucleic Acids Res. 25:158-14(2(1997).
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MEDLINE=91185626; Pubmed=2010552;
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Euteleostomi;

Chordata; Craniata; Vertebrata; Eutel Primates; Catarrhini; Hominidae; Pan.

(Chimpanzee)

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30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
ANDROGEN RECEPTOR (DIMYDROTESTOSTERONE RECEPTOR).
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                                                                          J. Mol. Evol. 47:334-3(2(1998).)

-I- FUNCTION: THE STEROES HORMORES AND THEIR RECEPTORS ARE INVOLVED ITHE REGULATION OF EURARYOTIC GENE EXPRESSION AND AFFECT CELLULAR PROLIFERRATION AND DIFFERENTIATION IN TARGET TISSUES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MEVQLGLGRVYPRPPSKTYRGAFQNLFQSVREVIQNPGPRHPEAASAAPPGASLLLLQQQ 60
MEDLINE-98404153; Pubmed-9732460; Choong C.S., Kemppainen J.A., Wilson E.M.; "Evolution of the primate androgen receptor: a structural basis for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                      DOMAIN: COMPOSED OF THREE DOMAINS: A MODULATING N-TERMINAL DO A DAM BINDING DOMAIN AND A C-TERMINAL STEROID-BINDING DOMAIN. SIMILARITY: BELONGS TO THE NUCLEAR HORMONE RECEPTORS FAMILY. NR3. SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 911;
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601B9BD4E697DAA4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 4794; DB 1;
Pred. No. 8.6e-220;
1; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                InterPro; IPR001103; Androgen_recep.
InterPro; IPR000536; Hormone_rec_lig.
InterPro; IPR001628; zf-C4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pfam; PF00166; Androgen_recep; 1. Pfam; PF00104; hormone_rec; 1. Pfam; PF00105; zf-C4; 1.
                                                                                                                                                      SUBCELLULAR LOCATION: NUCLEAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRINTS; PR00047; STROIDFINGER. PRINTS; PR00521; ANDROGENR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MM;
                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; U94177; AAC73048.1; -.
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98.4%;
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98402
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395
448
911 AA;
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                                                          disease."
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Matches 9(
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300
                                                                                                     AGKSTEDTAEYSPFKGGYTKGLEGESLGCSGSAAAGSSGTLELPSTLSLYKSGALDEAAA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Papio hamadryas (Hamadryas baboon).
Eukaryota, Metazoa, Chordata, Czaniata, Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
                                                                                                                                                                                                                                                            VAPYGYTRPPQGLAGQESDFTAPDVWYPGGMVSRVPYPSPTCVKSEMGPWMDSYSGPYGD
                                                                                                                                                                                                  MRLETARDHVLPIDYYFPPQKTCLICGDEASGCHYGALTCGSCKVFFKRAAEGKQKYLCA
                                                                                                                                                                                                                               KSRMYSQCVRMRHLSQEFGWLQITPQEFLCMKALLLFSIIPVDGLKNQKFFDELRMNYIK
                                                   SRNDCTIDKFRRKNCPSCRLRKCYEAGMTLGARKLKKLGNLKLQEEGEASSTTSPTEETT
                      ADLKDILSEASTMQLLQQQQQEAVSEGSSSGRAREASGAPTSSKDNYLGGTSTISDNAKE
                                                                        LCKAVSVSMGLGVEALEHLSPGEQLRGDCMYAPLLGVPPAVRPTPCAPLAECKGSLLDDS
                                                                                PQSALECHPERGCVPEPGAAVAASKGLPQQLPAPPDEDDSAAPSTLSLLGPTFPGLSSCS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
ANDROGEN RECEPTOR (DIHYDROTESTOSTERONE RECEPTOR).
                                                                                                                                                                                                                                                                                                                                                                                                                                                         895 AA
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NCBI_TaxID=9557;
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the European Bioinformatics Institute. There are no restrictions on its was by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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-!- DOMAIN: COMPOSED OF THREE DOMAINS: A MODULATING N-TERMINAL DOMAIN.
A DNA-BINDING DOMAIN AND A C-TERMINAL STEROID-BINDING DOMAIN.
-!- SIMILARITY: BELONGS TO THE NUCLEAR HORMONE RECEPTORS FAMILY.
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                                                                                     J. MOL. EVOL. 47:334-341(1998)/
-i- FUNCTION: THE STEROLE HORMOKES AND THEIR RECEPTORS ARE INVOLVED I
THE REGULATION OF EUKARYOTIC GENE EXPRESSION AND AFFECT CELLULAR
PROLIFERATION AND DIFFERENTIATION IN TARGET TISSUES.
                                                     for
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE; PS00031; NUCLEAR_RECEPTOR; 1. Receptor; Transcription regulation; DNA-binding; Nuclear protein;
                                                   receptor: a structural basis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 4694; DB 1; Length 895; Pred. No. 4.5e-215; 3; Mismatches 5; Indels 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (BY SIMILARITY)
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LIGAND-BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3; Mismatches
                                    E.M.;
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POLY-GLN.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         InterPro; IPR001103; Androgen_recep.
InterPro; IPR000536; Hormone_rec_lig.
                                      Wilson
                                                              coden
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              InterPro; IPR001628; zf-C4.
Pfam; PF02166; Androgen_recep; 1.
Pfam; PF00104; hormone_rec; 1.
PRIMIS; PR00105; Zf-C4; 1.
PRIMIS; PR00047; STROIDFINGER.
PRINTS; PR00521; ANDROGENR.
SEQUENCE FROM N.A.
MEDLINE=98404153; Pubmed=9732460;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96478 MW;
                                          Kemppainen J.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zinc-finger; Steroid-binding.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95.6%;
96.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; U94176; AAC73047.1; -.
                                                         "Evolution of the primater
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 96.1
Matches 887; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SMART; SM00430; HOLI; 1.
SMART; SM00399; ZNF_C4;
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555
595
895
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182
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387
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                                                                                                                                                                                                                                                                NR3 SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HSSP; P06536;
                                          Choong C.S.,
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SUBCELLULAR LOCATION: NUCLEAR

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MOL. Evol. 47:334-342(1998). WOLTER PROCEPTORS ARE INVOLVED IN THE RECULATION OF EURRECHTC GENE EXPRESSION AND AFFECT CELLULAR PROLIFERATION AND DIFFERENTIATION IN TARGET TISSUES.
                            281
                                                   360
                                                                                              420
                                                                                                                                      AAGPGSGSPSAAASSSWHTLFTAEEGQLYGPCGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGAAAA
                                                                                                                                                            AAGPGSGSPSAAASSSWHTLFTAEEGOLYGPC-----GGGGGGGGGGGGGGGGAGEAGA 452
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Choong C.S., Kemppainen J.A., Wilson B.M.; "Evolution of the primate androgen receptor: a structural basis for
LCKAVSVSMGLGVEALEHLSPGEQLRGDCMYAPLLGVPPAVRPTPCAPLAECKGSLLDDS
            AGKSTEDTAEYSPFKGGYTKGLEGESLGCSGSAAAGSSGTLELPSTLSLYKSGALDEAAA
                                                          YQSRDYYNFPLALAGPPPPPPPPPHPHARIKLENPLDYGSAWAAAAQCRYGDLASLHGAG
                                                                                                      VAPYGYTRPPQGLAGQESDFTAPDVWYPGGMVSRVPYPSPTCVKSEMGPWMDSYSGPYGD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR OR NR3C4.

Macaca fascicularis (Crab eating macaque) (Cynomolgus monkey).

Bukaryota: Metacoa: Chordata; Craniata; Vertebrata; Eutherestomi;

Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;

Cercopithecinae; Macaca.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-WAY-2000 (Rel. 39, Created)
30-WAY-2000 (Rel. 39, Last sequence update)
30-WAY-2000 (Rel. 39, Last annotation update)
ANDROGEN RECEPTOR (DIHYDROTESTOSTERONE RECEPTOR).
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MEDLINE=98404153; PubMed=9732460;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EIISVQVPKILSGKVKPIYFHTQ 923
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3;
        DWAIN: COMPOSED OF THREE DOMAINS: A MODULATING N-TERMINAL DOMAIN, DNA-BINDING DOMAIN AND A C-TERMINAL STEROID-BINDING DOMAIN. IMILARITY: BELONGS TO THE NUCLEAR HORMONE RECEPTORS FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QQQQQQQQQQQQQQQQQQQQQQETSPR-QQQQQQGEDGSPQAHRRGPTGYLVLDEEQQPS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120 QPQSALECHPERGCVPEPGAAVAASKGLPQQLPAPPDEDDSAAPSTLSLLGPTFPGLSSC 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SADLKDILSEASTMQLLQQQQQEAVSEGSSSGRAREASGAPTSSKDNYLGGTSTISDNAK 239
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                                                                                                                                                                                                                                                                                                      PROSITE; PS00031, NUCLEAR RECEPTOR; 1.
Receptor; Transcription regulation; DNA-binding; Nuclear protein; Zinc-finger; Steroid-binding.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AYQSRDYYNFPLALAGPPPPPPPPPHPHARIKLENPLDYGSAWAAAAQCRYGDLASLHGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 895,
                                                                                                                                                                                                                                                                                                                            ....ATING (BY SIMILARITY).
NUCLEAR RECEPTOR-TYPE.
C4-TYPE.
C4-TYPE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A3EB17916F43A097 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95.2%; Score 4678; DB 1; 95.9%; Pred. No. 2.6e-214;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2; Mismatches
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POLY-GLN.
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POLY-PRO.
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POLY-GLY.
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InterPro; IPR000536; Hormone_rec_lig-
InterPro; IPR010528; zf-C4.
Pfam; PF02166; Androgen_recep; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             448 PC
96494 MW;
                                                                                                                                                                                                                                   Pfam; PF00104; hormone_rec; î.
Pfam; PF00105; zf-C4; î.
                                                                                                                                                                                                                                                      PRINTS; PR00047; STROIDFINGER. PRINTS; PR00521; ANDROGENR.
                                                                                                                                                               EMBL; U94179; AAC73050.1; -
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                                                                                                                                                                                                                                                                                             SM00399; ZnF_C4;
                                                                                                                                                                                                                                                                                                                                                       555
555
895
62
74
182
366
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SMART; SM00399; ZnF C4
                                                                                                                                                                            P06536; 1RGD.
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                                             NR3 SUBFAMILY
                      A DNA-BINDIN SIMILARITY:
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hes 886;
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  This SMISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as its content is in no way modified and this statement is not removed. Usage by and for commercial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             J. MOL. Evol. 47:334-344(1998). A 1. MOL. Evol. 47:334-344(1998). The strength hormores and their receptors are involved in the regulation of euraperofic gene expression and Affect Cellular PROLIFERATION AND DIFFERENTIATION IN TARGET TISSUES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -!- SUBCELLULAR LOCATION: NUCLEAR.
-!- DOMAIN: COMPOSED OF THREE DOMAINS: A MODULATING N-TERMINAL DOMAIN,
A DNA-BINDING DOMAIN AND A C-TERMINAL STEROID-BINDING DOMAIN.
-!- SIMILARITY: BELONGS TO THE NUCLEAR HORMONE RECEPTORS FAMILY.
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341 AYQSRDYYNFPLALAGPPPPPPPPPPHPHARIKLENPLDYGSAWAAAAAQCRYGDLASLHGA 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Choong C.S., Remppainen J.A., Wilson E.M.; Freelution of the primate androgen receptor: a structural basis for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eulemur fulvus collaris (Collared brown lemur).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Strepsirhini; Lemuridae; Eulemur.
                                                               DMRLETARDHVLPIDYYFPPQKTCLICGDEASGCHYGALTCGSCKVFFKRAAEGKQKYLC
                                                                                                                                                                                                                                                                                       ASRNDCTIDKFRRKNCPSCRLRKCYEAGMTLGARKLKKLGNLKLQEEGEASSTTSPTEET
                                            30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
ANDROGEN RECEPTOR (DIHYDROTESTOSTERONE RECEPTOR).
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MEDLINE=98404153; Pubmed=9732460;
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NR3 SUBFAMILY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AVAPYGYTRPPQGLAGQESDFTAPDVWYPGGMVSRVPYPSPTCVKSEMGPWMDSYSGPYG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MEVQLGLGRVYPRPPSKTYRGAFQNLFQSVREVIQNPGPRHPEAASAAPPGASLLLLQQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            --------OQQQETSPPQQQQQQGEDGSPQAQSRGPTGYLALDEEQQPS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           89.7%; Score 4404.5; DB 1; Length 884; 90.3%; Pred. No. 2.1e-201;
                                                                                                                                                                                                                        PROSITE: PS00031; NUCLEAR RECEPTOR: 1. Receptor; Transcription regulation; DNA-binding; Nuclear
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                                                                                                                                                                                                                                                                      MODULATING (BY SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18F570E352F4D2BD CRC64;
                                                                                                                                                                                                                                                                                      NUCLEAR RECEPTOR-TYPE
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LIGAND-BINDING
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POLY-GLN.
POLY-ALA.
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POLY-PRO.
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                                                                             Interpro; IPR001103; Androgen_recep.
Interpro; IPR000536; Hormone_rec_lig
                                                                                                        Interpro; IPR001628; zf-C4.
Pfam; PF02166; Androgen_recep; 1.
Pfam; PF00104; hormone_rec; 1.
Pfam; PF00105; zf-C4; 1.
PRINTS; PR00047; STROIDFINGER.
PRINTS; PR00521; ANDROGENR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95610 MW;
                                                                                                                                                                                                                                                          Zinc-finger; Steroid-binding.
                                                EMBL; U94178; AAC73049.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 90.33
Matches 834; Conservative
                                                                                                                                                                                                SMART; SM00430; HOLI; 1
SMART; SM00399; ZnF_C4;
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884 AA;
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                                                                  P06536;
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ZN_FING
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AALLSSLNELGERQLVHVVKWAKALPGFRNLHVDDQMAVIQYSWMGLMVFAMGWRSFTNV 761
                                                                                                                                                                                                                                                                                                        Matches 822;
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ZN_FING
ZN_FING
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Best Local 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -!- DOMAIN: COMPOSED OF THREE DOMAINS: A MODULATING N-TERMINAL DOMAIN, A DNA-BINDING DOMAIN AND A C-TERMINAL STEROID-BINDING DOMAIN.
                                                                                                                      719
                                                                                                                                                680
                                                                                                                                                                            779
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                                                                                                                                                                                                                                                                                                                    860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lu B., Smock S.L., Castleberry T.A., Owen T.A.;
"Molecular cloring and functional characterization of the canine
androgen receptor."

Submitted (OCT-1999) to the EMBL/GenBank/DDBJ databases.

-- FUNCTION: WHE STEROID HORMONES AND THEIR RECEPTORS ARE INVOLVED I
THE REGULATION OF EUKARYOTIC GENE EXPRESSION AND AFFECT CELLULAR
PROLIFERATION AND DIFFERENTIATION IN TARGET TISSUES.
    DMRLETARDHVLPIDYYFPPQKTCLICGDEASGCHYGALTCGSCKVFFKRAAEGKQKYLC
                    TQKLTVSHIEGYECQPIFLNVLEAIEPGVVCAGHDNNQPDSFAALLSSLNELGERQLVHV
                                                                                                                               VKWAKALPGFRNLHVDDQMAVIQYSWMGLMVFAMGWRSFTNVNSRMLYFAPDLVFNEYRM
                                                                                                                                                                                     HKSRMYSQCVRMRHLSQEFGWLQITPQEFLCMKALLLFSIIPVDGLKNQKFFDELRMNYI
                                                                                                                                                                                                                                           840 KELDRIIACKRKNPTSCSRRFYQLTKLLDSVQPIARELHQFTFDLLIKSHMVSVDFPEMM
                                                                                                                                                                                                                                                                                                ASRNDCTIDKFRRKNCPSCRLRKCYEAGMTLGARKLKKLGNLKLQEEGEASSTTSPTEET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Euteleostomi;
Canis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chordata; Craniata; Vertebrata;
Carnivora; Fissipedia; Canidae;

    Last sequence update)
    Last annotation update)
    (DIHYDROTESTOSTERONE RECEPTOR).

                                                                                                                                                                                                                                                                                                                                                                                                                                           907 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            InterPro; IPR001103; Androgen_recep.
InterPro; IPR000536; Hormone_rec_lig.
InterPro; IPR001628; zf-C4.
                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                       900 AEIISVQVPKILSGKVKPIYFHTQ 923
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30-MAY-2000 (Rel. 39, Last sequ
30-MAY-2000 (Rel. 39, Last anno
ANDROGEN RECEPTOR (DIHYDROTESTY
                                                                                                                                                                                                                                                                                                                                                       EMBL; AF197950; AAF18084.1; -.
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zf-C4; 1.
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Mammalia; Eutheria;
NCBI_TaxID=9615;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
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Canis familiaris
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PF00105;
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Q9TT90;
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61 QQQQQQQQQQQQQQQQQQQQQETSPR-QQQQQGEDGSPQAHRRGPTGYLVLDEEQQPS 119
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                                                                                                                                                                                                                                                                         1 MEVQLGLGRVYPRPPSKTYRGAFQNLFQSVREVIQNPGPRHPEAASAAPPGASLLLLQQQ
                                                                                                                                                                                                                                                                                      SADLKDILSEASTWQLL--------QQQQQEAVSEGSSSGRAREASGAPT
                                                                                                                                                                                                                                                                                                                                                                                                                 SSKDNYLGGTSTISDNAKELCKAVSVSMGLGVEALEHLSPGEQLRGDCMYAPLLGVPPAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                          402 AAAAAQCRYGDLASLHGAGAAGPGSGSPSAAASSSWHTLFTAEEGQLYGPCGGGGGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   462 GGGGGGGGGGGGGGAVAPYGYTRPPQGLAGQESDFTAPDVWYPGGMVSRVPYPSPT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DG------GSVAPYGYTRPPQGLAGQEGDFPPPDVWYPGGVVSRVPFPSPS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RPTPCAPLAECKGSLLDDSAGKSTEDTAEYSPFKGGYTKGLEGESLGCSGSAAAGSSGTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ELPSTLSLYKSGALDEAAAYQSRDYYNFPLALAGPPPPPPPPPPHARIKLENPLDYGSAW
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                                                                                                                                                                                                                                    Length 907;
                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                   C8619F78DD2338AF CRC64;
                                                                                NUCLEAR RECEPTOR-TYPE
                                                                                                                                                                                                                                  Score 4319; DB 1;
Pred. No. 2.3e-197;
0; Mismatches 46;
                                                                                                               LIGAND-BINDING.
POLY-GLN.
POLY-GLN.
                                                                                                                                               POLY-GLN.
POLY-GLN.
POLY-SER.
POLY-PRO.
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RA MEDLIN=90256822; Pubbed=3341409;

RA MEDLIN=90256822; Pubbed=3341409;

RA Lubhan D.B. b., Olean K.L., French F.S., Wilson E.M.;

RA Lubhan D.B. olean K.L., French F.S., Wilson E.M.;

Insensitivity in the testicular femoired rat.";

RT "A single base mutation in the Tempirose rat.";

RT "A single base mutation in the Tempirose rat.";

RT "A single base mutation in the Tempirose receptor gene causes androgen races androgen rates the Tempirose receptor of the Tempirose rate insensitivity in the testicular femoired rat.";

RT BIOL. Chem. 265:8893-8900(1990). THEIR RECEPTORS ARE INVOLVED IN THE REGULATION OF EUKARYDATE GENE EXPRESSION AND AFFECT CELLULAR PROLIFERATION AND DIFFERENTIATION IN TARGET TISSUES.

C -1 SUBCELLULAR LOCATION: NUCLEAR TENELS IN THE SEMINAL VESICE, VENTRAL PROSTATE AND COAGULATING GLAND WITH LOWER LEVELS IN THE COMPOSED OF THREE DOMAINS: A MODULATING N-TERMINAL DOMAIN.

C -1 DOMAIN: COMPOSED OF THREE DOMAINS: A MODULATING N-TERMINAL DOMAIN.

A DNA-BINDING DOMAIN AND A C-TERMINAL STEROID-BINDING DOMAIN.

A DNA-BINDING DOMAIN AND A C-TERMINAL STEROID-BINDING DOMAIN.

C -1 DISPARSE DEFFECTS IN AR ARE A CAUGS OF ANDROGEN INSENSITYITY: RATS MITH THI SYNDROME ARE CALLED TESTICULAR FEMINIZED (TPM).

C -1 SIMILARITY: BELONGS TO THE NUCLEAR HORMONE RECEPTORS FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropaen Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   acid sequences of
                                                                                                       881
                                                                                                                                                                                                                                                                                                                                                                               Rattus norvegicus (Rat))
Eukaryota; Metazoe; Chórdata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
MEDILNE-98112209; Pubmed-3216867;
Tan J., Joseph D.R., Quarmby V.E., Lubahn D.B., Sar M., French F.S.
Wilson E.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               primary structure, autoregulation of it
NSRMLYFAPDLVFNEYRMHKSRMYSQCVRMRHLSQEFGWLQITPQEFLCMKALLLFSIIP
                                                                                                       VDGLKNQKFFDELRMNYIKELDRIIACKRKNPTSCSRRFYQLTKLLDSVQPIARELHQFT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chang C., Kokontis J., Liao S.;
"Structural analysis of complementary DNA and amino human and radrogen receptors.";
Proc. Natl. Acad. Sci. U.S.A. 85:7211-7215(1988)
                                                                                                                                                                                 FDLLIKSHMVSVDFPEMMAEIISVQVPKILSGKVKPIYFHTQ 923
                                                                                                                                                                                                                                                                                 P15207; 063049;
01-APR-1990 (Rel. 14, Created)
01-APR-1990 (Rel. 14, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
ANDROGEN RECEPTOR (DIHYDROTESTOSTERONE RECEPTOR).
                                                                                                                                                                                                                                                                         902 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the receptor protein."; Mol. Endocrinol. 2:1276-128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "The rat androgen receptor:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 messenger ribonucleic acid,
                                                                                                                                                                                                                                                                           STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=10116;
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entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@lsb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120 QPQSALECHPERGCVPEPGAAVAASKGLPQQLPAPPDEDDSAAPSTLSLLGPTFPGLSSC 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SKDNYLGGTSTISDNAKELCKAVSVSMGLGVEALEHLSPGEQLRGDCMYAPLLGVPPAVR 282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PTPCAPLAECKGSLLDDSAGKSTEDTAEYSPFKGGYTKGLEGESLGCSGSAAAGSSGTLE 342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        336
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         403 AAAAQCRYGDLASLHGAGAAGPGSGSPSAAASSSWHTLFTAEEGQLYGPCGGGGGGGGGG 462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ...----QQQQQEAVSEGSSSGRAREASGAPTS 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MEVQLGLGRVYPRPPSKTYRGAFQNLFQSVREVIQNPGPRHPEAASAAPPGASLLLLQQQ 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R -> Q (IN TFM; HAS ONLY 10-15% OF THE ANDROGEN-BINDING CAPACITY OF WILD-TYPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MEVQLGLGRVYPRPPSKTYRGAFQNLFQSVREAIQNPGPRHPEAASIAPPGACL-----
                                                                                                                                                                                                                                                                                                         PROSITE: PS00031; NUCLEAR_RECEPTOR; 1.
Receptor; Transcription regulation; DNA-binding; Nuclear protein; Zinc-finger; Steroid-binding; Disease mutation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 4200.5; DB 1; Length 902; Pred. No. 9.2e-192; Indels 57:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MISSING (IN REF. 3).
S -> L (IN REF. 2).
43F4064759FDCBED CRC64;
                                                                                                                                                                                                                                                                                                                                                                           NUCLEAR RECEPTOR-TYPE
                                                                                                                                                                                                                                                                                                                                                                                                           C4-TYPE.
LIGAND-BINDING.
                                                                                                                                                                                                                                                                                                                                                               MODULATING
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POLY-GLY.
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                                                                                                                                                                InterPro; IPR000536; Hormone_rec_lig.
InterPro; IPR001628; zf-C4.
                                                                                                                                                                                                                                                                                                                                                                                             C4-TYPE.
                                                                                                                                                    InterPro; IPR001103; Androgen_recep
                                                                                                                                                                                              Promise Pro166; Androgen_recep; 1. Pfam; Pr00104; hormone_rec; 1. Pfam; Pr00105; zf-C4; 1.
                                                                                                                                                                                                                                              PRINTS; PRO0047; STROIDFINGER.
PRINTS; PRO0021, ANDROGENR.
SMART; SM00430; HOLIT;
SMART; SM00399; ZnF_C4; 1.
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                                                 EMBL; M20133; AAA40733.1; -. EMBL; M23264; AAA40759.1; -. EMBL; J05454; AAA40734.1; -.
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Matches 796; Conservative
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HSSP; P06536; 1RGD.
TRANSFAC; T00042; -.
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                                                                                                                                                                                                                                                                                                                                 801
                                                                                                                                                                                                                                                                                                                                                                       He W.W., Fischer L.M., Sun S., Bilhartz D.L., Zhu X., Young C.Y.F., Kelley D.B., Tindall D.J., Molecular Cloning of androgen receptors from divergent species with a polymerase chain reaction technique: complete cDNA sequence of the mouse androgen receptor and isolation of androgen receptor cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The mouse androgen receptor. Functional analysis of the protein and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
MEDLINE-91354214; PubMed=1883336;
Faber P.W., King A., van Rooij H.C.J., Brinkmann A.O., de Both N.J.,
                                                   ALLSSLNELGERQLVHVVKWAKALPGFRNLHVDDQMAVIQYSWMGLMVFAMGWRSFTNVN
                                                                                                                                                                                                                                                                GGGGGGGGGGGGAVAPYCYTRPPQGLAGQESDFTAPDVWYPGGMVSRVPYPSPTC
                                                                                        VKSEMGPWMDSYSGPYGDMRLETARDHVLPIDYYFPPQKTCLICGDEASGCHYGALTCGS
                                                                                                                                          583 CKVFFKRAAEGKQKYLCASRNDCTIDKFRRKNCPSCRLRKCYEAGMTLGARKLKKLGNLK
                                                                                                                                                                                               LQEEGEASSTISPIETTQKLIVSHIEGYECQPIFLNVLEAIEPGVVCAGHDNNQPDSFA
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Eukaryota; Metazoa. Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          the androgen receptor mRNA in
862 DLLIKSHMVSVDFPEMMAEIISVQVPKILSGKVKPIYFHTO 902
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20-ANG-2001 (Rel. 40, Last annotation update)
ANDROGEN RECEPTOR—CHIMYDROTESTOSTERONE RECEPTOR).
AR OR NR344.
                                                                                                                                                                                                                                                                                                                                                                                                            883 DLLIKSHMVSVDFPEMMAEIISVQVPKILSGKVKPIYFHTQ
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Biochem. Biophys. Res. Commun. 171:697-704(
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Gaspar M.L., Meo T., Tosi M.;
"Structure and size distribution of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=90386642; PubMed=2403358;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     wild-type and Tfm/Y mutant mice
Mol. Endocrinol. 4:1600-1610
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                    NI
                                                                                                                                                                                                                                                                                                                                                         SUBCELLULAR LOCATION: NUCLEAR.
DOMAIN: COMPOSED OF THREE DOMAINS: A MODULATING N-TERMINAL DOMAIN,
A DNA-BINDING DOMAIN AND A C-TERMINAL STEROID-BINDING DOMAIN.
MISCELLANBOUS: IN THE ABSENCE OF LIGAMD, STEROID HORMONE RECEPTORS
ARE THOUGHT TO BE WEAKLY ASSOCIATED WITH NUCLEAR COMPONENTS;
                                                                                                                                                                                                                                         Endocrinol. 5:573-591(1991). 
Endocrinol. 5:573-591(1991). 
FUNCTION: THE STEROID HORMONES AND THEIR RECEPTORS ARE INVOLVED I 
THE REGULATION OF EUKARTOTIC GENE EXPRESSION AND AFFECT CELLULAR PROLIFERATION AND DIFFERENTIATION IN TARGET TISSUES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                      androgen receptor messenger RNA
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PROSITE; PS00031; NUCLEAR_RECEPTOR; 1.
Receptor; Transcription regulation; DNA-binding; Nuclear protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HORMONE BINDING GREATLY INCREASES RECEPTOR AFFINITY. THE HORMONE-RECEPTOR COMPLEX APPEARS TO RECOGNIZE DISCRETE DNA SEQUENCES UPSTREAM OF TRANSCRIPTIONAL START SITES.
SIMILARITY: BELONGS TO THE NUCLEAR HORMONE RECEPTORS FAMILY. NR3 SUBFAMILY.
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                                                                                                                MEDLINE=92017874; PubMed=1681426;
Charest N.J., Zhou Z., Lubahn D.B., Olsen K.L., Wilson E.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 899;
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FD9EE07C07F7A568 CRC64;
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84.1%; Pred. No. 1.3e-190;
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InterPro; IPR000536; Hormone_rec_lig_
InterPro; IPR001628; zf-C4
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                                                                                                                                                                      French F.S.;
"A frameshlit mutation destabilizes
"The Tim mouse.";
Mol. Endocrinol. 5:573-591(1991).
                                                                                                                                                                                                                          the Ifm mouse.";
1. Endocrinol. 5:573-5\phi1(1991).
characterization of the gene. 7; X Biochem. J. 278:269-278(1991).
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Pfam; PF02166; Androgen recep; l. Pfam; PF00104; hormone_rec; l. Pfam; PF00105; zf-C4; l. Primrs; PR000047; sTROIDFINGER. PRINTS; PR00521; ANDROGENR.
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EMBL, X53779; CAA37795.1; -.
EMBL, M37890; AAA37234.1; -.
EMBL; X59592; CAA42160.1; -.
                                                                                                                                                                                                                                                                              -!- FUNCTION: THE STEROID
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Matches 790; Conservative
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PIR, A37255; A37255.
PIR, A37908, A37908.
PIR, S17198; S17198.
PIR, S34398; S34398.
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SMART; SM00399; ZNF_C
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                                                                                      SEQUENCE FROM N.A.
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                                    STLSLYKSGALDEAAAYQSRDYYNFPLALAGPPPPPPPPPPHARIKLENPLDYGSAWAAA 404
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                1 MEVQLGLGROYYPRPPSKTYRGAFQNLFQSVREAIQNPGPRHPEAANIAPPGACL-----
                                                                           SADLKDILSEASTMQLLQ-------QQQQEAVSEGSSGRAREASGAPTSSK
                                                                                                                                                             PCAPLAECKGSLLDDSAGKSTEDTAEYSPFKGGYTKGLEGESLGCSGSAAAGSSGTLELP
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                                                                                                                                                                                                                                                                                                 SUBCELLULAR LOCATION: NUCLEAR.

DOMAIN: COMPOSED OF THREE DOMAINS: A MODULATING N-TERMINAL DOMAIN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   318 YTKGLEGESLGCSGSAAAGSSGTLELPSTLSLYKSGALDEAAAYQSRDYYNFPLALAGPP 377
                                                                                                                                                                                                  62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            258 HLSPGEQLRGDCMYAPLLGVPPAVRPTPCAPLAECKGSLLDDSAGKSTEDTAEYSPFKGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QQQQEAVSEGSSSGRAREASGAPTSSKDNYLGGTSTISDNAKELCKAVSVSMGLGVEALE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SMART, SM00430; HOLI; 1.
SMART, SM00439; ZnF_C4; 1.
SMART; SP00031; NUCLEAR_ERCEPTOR; 1.
Receptor; Transcription regulation; DNA-binding; Nuclear protein; Zinc-finger; Steroid-binding.
                                    Euteleostomi;
                                                                                                                                                                                                                                                                                                                                   A DNA-BINDING DOMAIN AND A C-TERMINAL STEROID-BINDING DOMAIN. SIMILARITY: BELONGS TO THE NUCLEAR HORMONE RECEPTORS FAMILY. NR3 SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19;
                                                                                                                                                                 Krongrad A., Wilson J.D., McPhaul M.J.; "Cloning and partial seguence of the rabbit androgen receptor:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 709;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31; Indels
                                    Vertebrata; Eure; Oryctolagus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          40E7666137E97B6B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MODULATING.
NUCLEAR RECEPTOR-TYPE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              71.4%; Score 3509.5; DB 1; 90.9%; Pred. No. 3.1e-159; iive 16; Mismatches 31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LIGAND-BINDING.
POLY-GLN.
                                    Chosdata Craniata; Ver
Lagomorpha; Leporidae;
                                                                                                          SEQUENCE FROM N.A.
STRAIN-NEW ZEALAND WHITE; TISSUE-Prostate;
MEDLINE-96044663; Pubmed-7559153;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      POLY - PRO.
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InterPro; IPR00536; Hormone_rec_lig.
InterPro; IPR001628; zf-04.
Pfam; PF02166; Androgen_recep; l.
Pfam; PF00104; hormone_rec; l.
Pfam; PF00105; zf-C4; l.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C4-TYPE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C4-TYPE
                   (Rabbit)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          77391 MW;
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411
369
369
709
709
6
1187
207
262
                   Oryctolagus cuniculus
                                    Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              182
201
254
709 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HSSP; P06536; 1RGD.
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349
349
385
480</pre>
                                                                         NCBI_TaxID=9986;
OR NR3C4
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ZN_FING
ZN_FING
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DOMAIN
SEQUENCE
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DOMAIN
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3

(Rel. 33, Created) (Rel. 33, Last sequence update) (Rel. 39, Last annotation update)

709 AA

STANDARD;

ANDR_RABIT

ANDR_RABIT P49699; 01-FEB-1996 (01-FEB-1996 (30-MAY-2000 (

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DOMAIN: COMPOSED OF THREE DOMAINS: A MODULATING N-TERMINAL DOMAIN, A DNA-BINDING DOMAIN AND A C-TERMINAL STEROID-BINDING DOMAIN. SIMILARITY: BELONGS TO THE NUCLEAR HORMONE RECEPTORS FAMILY.
                                                                                                                                                                                                                                                                                   643
                                                                                                                                                                                                                                                                                                                                                                          497
                                                                                       557
                                                                                                    GDFPAPEVWYPGGVVSRVPYPNPSCVKSEMGPWMESYSGPYGDMRLETARDHVLPIDYYF 343
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                                                                                                                                                                                                                                                                                                                    FGWLQITPQEFLCMKALLLFSIIPVDGLKNQKFFDELRMNYIKELDRIIACKRKNPTSCS 857
                                                       LNVLEAIEPGVVCAGHDNNQPDSFAALLSSLNELGERQLVHVVKWAKALPGFRNLHVDDQ 737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Proc. Natl. Acad. Sci. U.S.A. 83:9045-9049(1986) 119 Proc. Natl. Acad. Sci. U.S.A. 83:9045-9049(1986) 119 Proc. THE PEGULATION OF EUGHARYOTIC GENE EXPRESSION AND AFFECT CELLULAR PROLIFERATION AND DIFFERENTIATION IN TARGET TISSUES.
                                                                                                                                                                                                                                                                        MAVIQYSWMGLMVFAMGWRSFTNVNSRMLYFAPDLVFNEYRMHKSRMYSQCVRMRHLSQE
                                                                                                                                                                                                                                                                                                                                RRFYQLTKLLDSVQPIARELHQFTFDLLIKSHMVSVDFPEMMAEIISVQVPKILSGKVKP
           -QPPPPHPR-RIKLENPLDYGSAWAAAAQCRYGDLASLHGGGAAGPGSGSPSTAASSSW
                                             HTLFTAEEGQLYGPCGGGGGGGGGGGGGGGGGGGGGGGAVAPYGYTRPPQGLAGQE
                                                                                                                                                                               CRLRKCYEAGMTLGARKLKKLGNLKLQEEGEASSTTSPTEETTQKLTVSHIEGYECQPIF
                                                                                                                                                                                            MEDLINE-87067449; Pubmed-3538016;
Loosfelt H., Atger M., Misrahi M., Guiochon-Mantel A., Meriel C.,
Logeat F., Benarous R., Milgrom E.;
"Cloning and sequence analysis of rabbit progesterone-receptor
complementary DNA.":
PPPPPPPPHPHARIKLENPLDYGSAWAAAAAQCRYGDLASLHGAGAAGPGSGSPSAAASSSW
                                                                                        SDFTAPDVWYPGGMVSRVPYPSPTCVKSEMGPWMDSYSGPYGDMRLETARDHVLPIDYYF
                                                                                                                                    PPQKTCLICGDEASGCHYGALTCGSCKVFFKRAAEGKQKYLCASRNDCTIDKFRRKNCPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Ch<mark>ordata;</mark> Craniata; Vertebrata; Eut
Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        930 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Created)
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                                                                  HTLFTTEEGQLYGLC-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PS-JUL-1999 (REL 38,
REGESTERONE RECEPTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JAN-1988 (Rel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=9986;
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704 IYFHTQ 709
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P06186;
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                                                                                                                                                                                                                                                                                                                                                                 858
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                      181
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99 PQAHR---RG--PTGYLVLDEEQQPSQPQSALECHPERGCVPEPGAAVAASKGLPQQLPA 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----SEGTVGPLLKGOPRALGGTAAGGGAA 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FIHVPILPLNHAFLATRTRQLLE--GESYDGGAAAASPFVPQRGSPSASSTPVAGGDFPD 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360 CTYPPDAEPK-----DDAFPLYGDFQ-PPALKIKEEEEBAAAARSPRTYLVAGANPAA 412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     91 VEAPEGAGDSSSRPPEKD----SGLLDSVLDTLLAPSGPGQSHASPATCEAISPWCLFG 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FP-LALAGPPPPPPPPHPHARIKLENPLDYGSAWAAAAAQCRYGDLASLHGAGAAGPGSG 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIGNAL (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ----- 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRHPEAASAAPPGASLLLLLQQQQQQQQQQQQQQQQQQQQQQQQQGETSPRQQQQQQGEDGS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           154 PPDEDDSAAPSTLSLLGPTFPGLSSCSADLKDILSEASTMQLLQQQQQEAVSEGSSSGRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REASGAPTSSKDNYLGGTSTI-SDNAKELCKAVSVSMGLGVEALEHLSPGEQLRG----D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 254 PVASGAAA-----GGVALVPKEDSRFSAPRVSLA-----EQDAPVAPGRSPLATSVVD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CMYAPLLGVPPAVRPTPCAPLAECKGSLLDDSAGKST-----EDTAEYSPFKGG----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          --YTKGLEGESLGCSGSAAAGSSGTLELPSTLSLYKSGALDEAAAYQSRDYY-----N
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            479 GAVAPYGYTRPPQGLAGQESDFTAPDVWYPGGMVSR-----VPYPSPTCVKSEMGPWMD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           227;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                     SMART; SM00430; HOLL; 1.
SMART; SM00399; ZNF_C4; 1.
PROSTER; PS00031; NUCLEAR RECEPTOR; 1.
Receptor; Transcription regulation; DNA-binding; Nuclear; Zinc-finger; Steroid-binding.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
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STEROID-BINDING.
NUCLEAR LOCALIZATION SIGN
644FF4C13BF2F883 CRC64,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MODULATING, PRO-RICH.
NUCLEAR RECEPTOR-TYPE
C4-TYPE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 1262.5; DB 1;
Pred. No. 5.6e-53;
2; Mismatches 308;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     413 FPDFQLAAPPPSLPP----RVPSSRP---GEA----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MEVOLGLGRVYPRPPSKTYRGAFONLFOSVREVIONP-
                                                                                                                                                                                                                    TRANSFAC, T00697; -
Interpro; IPR000536; Hormone_rec_lig.
Interpro; IPR000128; Progest_rcptor.
Interpro; IPR001628; zf-C4.
Pfam; PF00104; hormone_rec; 1.
Pfam; PF00104; hormone_rec; 1.
Pfam; PF00105; zf-C4; 1.
Pfam; PF00105; zf-C4; 1.
PRINTS; PR00047; STROIDFINGER.
PRINTS; PR00544; PROGESTRONER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative 122;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25.7%;
                                                                                                                                             EMBL; M14547; AAA31443.1; -.
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|QVDEEDSSE------
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588
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930
                                                                                                                                                                        PIR; A25923; A25923.
                                                                                                                                                                                         HSSP; P06401; 1A28.
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930 #
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ZN_FING
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MEDLINE-98282128; PubMed=9620806;
Williams S.P., Sigler P.B.;
"Atomic structure of progesterone complexed with its receptor.";
Nature 393:392-396(1998).
-i- FUNCTION: THE STEROID HORMONES AND THEIR RECEPTORS ARE INVOLVED IN
                                                                                                                                                                           NELGERQLVHVVKWAKALPGFRNLHVDDQMAVIQYSWMGLMVFAMGWRSFTNVNSRMLYF 768
                                                                                                                                                                                                                                                                              895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A., AND ALTERNATICE SPLICING.
MEDLINE-90228361; Pubmed-2328727;
Kastner P., Krust A., Turcotte B., Stropp U., Tora L., Gronemeyer H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Two distinct estrogen-regulated promoters generate transcripts encoding the two functionally different human progesterone receptor
                               SYSGPYGDMRLETARDHVLPIDYYFP--PQKTCLICGDEASGCHYGALTCGSCKVFFKRA
                                                                                     508 AAPALX----PTLGLNG-----LPQLGYQAAVLKEGLPQVYTPY-----LNYLRPDSE
                                                    ASOSP------QYSFESLPQKICLICGDEASGCHYGVLTCGSCKVFFKRA
                                                                      591 AEGKQKYLCASRNDCTIDKFRRKNCPSCRLRKCYEAGMTLGARKLKKLGNLKLQEEGEAS
                                                                                                                                 ALPQPVGIPNESQRITFSPSQEIQLIPPLINLLMSIEPDVIYAGHDNTKPDTSSSLLTSL
                                                                                                                                                                                                                        829 KFFDELRMNYIKELDRIIACKRKNPTSCSRRFYQLIKLLDSVQPIARELHQFTFDLLIKS
                                                                                                                                                                                                                                                                 651 STTSPT--EETTQKLIVSHIEGYECQPIFLNVLEAIEPGVVCAGHDNNQPDSFAALLSSL
                                                                                                                                                                                                            APDLVFNEYRMHKSRMY SQCVRMRHLSQEFGWLQITPQEFLCMKALLLFSIIPVDGLKNQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia; Eutheria, Primates; Catarrhini, Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE-87184565; PubMed-3551956; Misrahi M., Atger M., D'Auriol L., Loosfelt H., Meriel C., Misrahi M., Atger M., D'Auriol L., Loosfelt H., Meriel C., Friddansky F., Guiochon Mantel A., Galibert F., Milgrom E.; "Complete amino acid sequence of the human progesterone receptor deduced from cloned conA."; Biochem. Biophys. Res. Commun. 143:740-748(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
Kieback D.G., Agoulnik I.U., Tong X.-W.;
Submitted (JUL-1997) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                    P06401; Q9UPF7;
01-JAN-1988 (Rel. 06, Created)
0-MG-2001 (Rel. 40, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                             933 AA
                                                                                                                                                                                                                                                                                                            889 HMVSVDFPEMMAEIISVQVPKILSGKVKPIYFH 921
                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                               PROGESTERONE RECEPTOR (PR).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBO J. 9:1603-1614(1990).
                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              forms A and B.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     33;
                                                                                                                      DOMAIN,
THE REGULATION OF EUKARYOTIC GENE EXPRESSION AND AFFECT CELLULAR SUBCELLULAR LOCATION: NUCLEAR.

SUBCELLULAR LOCATION: NUCLEAR.

ALTERNATIVE PRODUCTS: 2 ISOFORMS; A (SHOWN HERE) AND B; ARE PRODUCED BY ALTERNATIVE SPLICING.

DOMAIN: COMPOSED OF THREE DOMAINS: A MODULATING N-TERMINAL DOMAIN

A DNA-BINDING DOMAIN AND A C-TERMINAL STEROID-BINDING DOMAIN.

SIMILARITY: BELONGS TO THE NUCLEAR HORMONE RECEPTORS FAMILY.

NR3 SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUCLEAR LOCALIZATION SIGNAL (POTENTIAL).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            125 LECHPERGCVPEPGAAVAASKG--LPQQLPAPPDEDDSAAPSTLSLLGPTFP-----GL 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROSITE: PS00031; NUCLEAR RECEPTOR; 1.
Receptor; Transcription regulation; DNA-binding; Nuclear protein;
Zinc-finger; Steroid-binding; Phosphorylation; Alternative splicing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     67 QQQQQQQQQQQQQQQQETSPRQQQQQGEDGSPQAHRRGPTGYL--VLDEEQQPSQPQSA 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 GPRAPHVAGGPPSPEVGSPLLCRPAAGPFPGSQTSDTLPEVSAIPISLDGLLFPRPCQGQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels 214;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PHOSPHORITATION (BY CK).
PHOSPHORYLATION (BY CK).
PHOSPHORYLATION (BY CK).
PHOSPHORYLATION (BY CK).
PHOSPHORYLATION (BY CK).
MISSING (IN ISOFORM B).
G -> S (IN REF. 1).
C -> Y (IN REF. 1).
L -> Y (IN REF. 1).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   329;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25.6%; Score 1256; DB 1;
ilarity 34.5%; Pred. No. 1.1e-52;
Conservative 119; Mismatches 329;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STEROID-BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    InterPro; IPR000536; Hormone_rec_lig.
InterPro; IPR000128; Progest_rcptor.
InterPro; IPR00128; Progest_rcptor.
InterPro; IPR001628; Zf-C4.
Pfam; PF00104; hormone_rec; 1.
Pfam; PF00105; Zf-C4; 1.
PRINTS; PR00047; STROIDFINGER.
PRINTS; PR00544; PROGESTRONER.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         AF016381; AAD01587.1;
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SMART; SM00399; ZDF_C4;
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TRANSFAC; T00696; -.
MIM; 264080; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           38 GPRHPEAASAAP---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PIR; A03245; ORHUP.
PIR; S09971; S09971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 Similarity 349; Conserv
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750
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KFNKVRVVRALDAVALPQPLGVPNESQALSQRFTFSPGQDIQLIPPLINLLMSIEPDVIY 700
                                                                                                                                                                                                                                                                                    CRYGDLASLHGAGAAGPGSGSPSAAASSSWH---TLFTAE----EGQLYGPCGGGGGG 459
                                                                                                                                                                                                          AFAPPRSSPCASSTPVAVGDFPDCAYPPDAEPKDDAYPLYSDFOPPALKIKEEEEGA--E 395
                                                                                                                                  QLRG----DCMYAPLLGVPPAVRPTPCAPLAECKGSLLDDSAGKSTEDTAEYSPFKGGYT 319
                                                                                                                                                         SPLATIVMDFIHVPIL-----PLNHALLAARTRQLLEDES-----YDGGAGAAS 337
                                                                                                                                                                                                                                     ---NFPLALAGPPPPPPPPHPHARIKLENPLDYGSAWAAAAAQ 407
AGHDNNQPDSFAALLSSLNELGERQLVHVVKWAKALPGFRNLHVDDQMAVIQYSWMGLMV
                                                                                                                                                                                    KGLEGESLGCSGS--AAAGSSGTLELP----STLSLY------KSGALDE
                                                                                                                                                                                                                                                                                                                                      GGGGGGGGGGGGGGGGAVAPYGYTRPPQGLAGQESDFTAPDVWYPGGMVSR-VPYP
                                                                                                                                                                                                                                                                                                                                                             GCLLPRDGLPSTSASAAAAGA-APALY--PALGLNG-----LPQLGYQAAVLKEGLPQV
                                                                                                                                                                                                                                                                                                                                                                                      SPTCVKSEMGPWMDSYSGPYGDMRLETARDHVLPIDYYFP--PQKTCLICGDEASGCHYG
                                                                                                                                                                                                                                                                                                                                                                                                                                      ALICGSCKVFFKRAAEGKQKYLCASRNDCTIDKFRRKNCPSCRLRKCYEAGMTLGARKLK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KLGNLKLQEEGEASSTTSP-----TEETTQKLTVSHIEGYECQPIFLNVLEAIEPGVVC
                                                                                                  ---- QQQQQEAVSEGSSSGRAREASGA
                                                          SSGTAAAHKVLPRGLSPARQLLLPASESPHWSGAPVKPSPQAAAVEVEEEDGSESEESAG
                                                                                     ---KELCKAVSVSMGLGVEALEHLSPGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     871 QPIARELHQFTFDLLIKSHMVSVDFPEMMAEIISVQVPKILSGKVKPIYFH 921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-MAY_2000 (Rel. 39, Created)
30-MAY_2000 (Rel. 39, Last sequence update)
PROGESTERONE RECEPTOR (PR).
                                                                                                                                                                                                                                                   |:| | | :| | | 396 ASARSPRSYLVAGANPAAFPDFPL---GPPPFLPP-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AA
                                     SSCSADLKDILSE--ASTMQLL---
                                                                                       P-TSSKDNYLGGTSTISDNA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
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PRGR_RAT
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Rattus norvegicus (Rat). Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus. NCBI_TaxID=10116;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          249
                                                                                                                                                                                    DOMAIN: COMPOSED OF THREE DOMAINS: A MODULATING N-TERMINAL DOMAIN, A DNA-BINDING DOMAIN AND A C-TERMINAL STEROID-BINDING DOMAIN. SIMILARITY: BELONGS TO THE NUCLEAR HORMONE RECEPTORS FAMILY. NR3 SUBFAMILY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ---QQQQQQETSPRQQQQQGEDGSPQAHRRGPTGYL 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUCLEAR LOCALIZATION SIGNAL (POTENTIAL) 05384B9656BF22DC CRC64;
                        PETRAIN-SPRAGUE-DAWLEY, TISSUE-Placenta;

MEDLINE=94130817; PubMed=8299566;

Park-Sarge O.K., Mayo K.E.;

Park-Sarge O.K., Mayo K.E.;

Park-Sarge O.K., Mayor K.E.;

Park-Sarge O.K., Mayor K.E.;

Park-Sarge O.K., Mayor K.E.;

Park-Sarge O.K., Mayor K.E.;

Endocrinology 134:709-718(1994).

I- FUNCTION: THE STEROID HORMONES AND THEIR RECEPTORS ARE INVOLVED IN THE RECULATION OF EUKARYOTIC GENE EXPRESSION AND AFFECT CELLULAR PROLIFERATION AND DIFFERRATION IN TARGET TISSUES.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25.1%; Score 1234; DB 1; Length 923; 33.1%; Pred. No. 1.2e-51; ive 129; Mismatches 299; Indels 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRINTS; PRO0047; STROIDFINGER.
PRINTS; PRO0544; PROGESTRONER.
SMART; SMO0430; HOLL; 1.
SWART; SMO0399; ZnE_C4; 1.
PROSITE; PSO0031; NUCLEAR_RECEPTOR; 1.
Receptor; Transcription regulation; DNA-binding; Nuclear Zinc-finger; Sterold-binding.
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InterPro; IPR00128; Progest_rcptor.
InterPro; IPR001628; zf-4.
Pfam; PF00104; hormone_rec; 1.
Pfam; PF00161; prog_receptor; 1.
Pfam; PF00105; zf-C4; 1.
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                                                                                                                                                                          SUBCELLULAR LOCATION: NUCLEAR.
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923 AA;
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ZN_FING
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      DAPVAPGRSPLATTVVDFIHVPILPLNHALLAARTRQLLEGDSYDGGAAAQVPFAPPRGS 344
                                 PPAVR-PTPCAPLAECKGSLLDDSAGKSTED-TAEYSPFKGGYTKGLEGESLGCSGSAAA 335
                                                                    GSSGTLELPSTLSLYKSGALDEAAAYQSRDYYNFPLALAGPPPPP--PPPHPHARIKLEN 393
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                                                                                                                                                                                                                                                                                                                 KALPGFRNLHVDDQMAVIQYSWMGLMVFAMGWRSFTNVNSRMLYFAPDLVFNEYRMHKSR 783
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                                                                                                                                                                                                                                                                                                                                                                                               Gallus gallus (Chicken),
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                  PSAPSPPVPCGDFPDC----TYPPEGDPKEDGFPVYGEFQPPGLKIKEEE----EGTEAA
                                                                                                     394 PLDYGSAWAAAAQCRYGDLAS-----LHGAGAAGPGSGS-----PSAAASSSWH
                                                                                                                TLFTAEEGQLYGPCGGGGGGGGGGGGGGGGGGGGGGAVAPYGYTRPPQGLAGQES
                                                                                                                                                                        DFTAPDVWYPGGMV-SRVPYPSPTCVKSEMGPWND-----SYSGPYGDMRLETARDH
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                                                                                                                                                                                                                                                       -CLLPRDSLPAAP-----TSSAAPAIY--PPLGLNG---
                                                                                                                                                                                         ---LPQLGYQAAVLKDSLPQVYP-----PYLNYLRPDSEASQSPQYGFDSL----
                                                                                                                                                                                                                    SEQUENCE FROM N.A.
MEDLINE=8816640; PubMed=3443098;
Gronemeyer H., Turcotte B., Quirin-Stricker C., Bocquel M.T.,
Meyer M.E., Krozowski Z., Jeltsch J.M., Lerouge T., Garnier J.M.,
Chambon P.,
                                                                                     SRS----PRPYLL-----AGASAATFPDFPL----PPRPPRAPPSRP---
   --EALEHLSPGEQLRGDCM---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Last sequence update)
Last annotation update)
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P07812; Q90946;
01-AUG-1988 (Rel. 08, Created)
01-AUG-1988 (Rel. 08, Last sequent 1988 (Rel. 09, Last sequent 1988)
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904 AAQLPKILAGMVKPLLFH 921
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250 GLGV-
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ALTERNATIVE PRODUCTS: 4 ISOFORMS; A (SHOWN HERE), A', B AND B';
ARE PRODUCED BY ALTERNATIVE SPLICING.
TISSUE SPECIFICITY: O'LIDGYT
DOMAIN: COMPOSED OF THREE DOMAINS: A MODULATING N-TERMINAL DOMAIN,
SIMILARIY: BELONGS TO THE NUCLEAR HORMONE RECEPTORS FAMILY.
NR3 SUBFAMILY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEGURATION: THE STEROID HORMONES AND THEIR RECEPTORS ARE INVOLVED I THE REGULATION OF EUGARYOTIC GENE EXPRESSION AND AFFECT CELLULAR PROLIFERATION AND DIFFERENTIATION IN TARGET TISSUES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "The chicken progesterone receptor A and B isoforms are products of an alternate translation initiation event."; J. Biol. Chem. 264:14062-14064(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cook R.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=90154085; PubMed=2303488; Jeltsch J.-M., Turcotte B., Garnier J.-M., Lerouge T., Krozowski Gronemeyer H., Chambon P.; Chancemere and Characterization of multiple mRNAs originating from the chicken progesterone receptor gene. Evidence for a specific transcript
                                                                                                           SEQUENCE FROM N.A.
MEDLINE=91042592; PubMed=3153474;
Conneely O.M., Dobson A.D.W., Tsai M.-J., Beattie W.G., Toft D. Huckaby C.S., Zarucki T., Schrader W.T., O'Malley B.W.;
"Sequence and expression of a functional chicken progesterone
progesterone receptor: sequence, expression and
                                                                                                                                                                                                                                                                                                                                                               SEQUENCE OF 128-164 FROM N.A.
MEDLINE=86289413; PubMed=2426779;
Connecly O.M., Sullivan W.P., Toft D.O., Birnbaumer M., Cook
Maxwell B.L., Zaruckl-Schulz T., Greene G.L., Schrader W.T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conneely O.M., Kettelberger D.M., Tsai M.-J., Schrader W.T., O'Malley B.W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Jeltsch J.M., Krozowski Z., Quirin-Stricker C., Gronemeyer B Simpson R.J., Garnier J.M., Krust A., Jacob F., Chambon P., "Cloning of the chicken progesterone receptor."; Proc. Natl. Acad. Sci. U.S.A. 83:5424-5428(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Molecular cloning of the chicken progesterone receptor."; Science 233:767-770(1986).
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                                                                                                                                                                                                                                                                                                           Mol. Endocrinol. 1:517-525(1987).
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                      functional analysis.";
EMBO J. 6:3985-3994(1987).
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AAA49039.1;
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AAA49035.1;
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M14279;
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M31104;
M32726;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           O'Malley B.W.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              M37518;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   M14280;
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EMBL;
EMBL;
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15

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RNLHVDDQMAVIQYSWMGLMVFAMGWRSFTNVNSRMLYFAPDLVFNEYRMHKSRMYSQCV 789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RKNPTSCSRRFYQLTKLLDSVQPIARELHQFTFDLLIKSHMVSVDFPEMMAEIISVQVPK 909
                                                    426
                                                                                258
                                                                                                           475
                                                                                                                                                                                                                                                                               623
                                                                                                                                                                                                                                                                                               624 YEACMTLGARKLKKLGNLK-------LQEEGEASSTTSPTEETTQKLJTVSHIE 669
                                                                                                                                                                                                                                                                                                                                                          GYECQPIFLNVLEAIEPGVVCAGHDNNQPDSFAALLSSLNELGERQLVHVVKWAKALPGF 729
                                                                                                                                                                                                                                                                                                                                                                                                              366
                                                                                                                                                                                             364
                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RMRHLSQEFGWLQITPQEFLCMKALLLFSIIPVDGLKNQKFFDELRMNYIKELDRIACK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Craniata; Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae; Mus.
                                                                      365 YSPLGLNGHHQALGFPAAVLKEGLPQL---CPPYLGYVRPDIETSQSSQYSFESLPQKIC
                        ---APAAAASPAAVE------GODY
                                                    367 YNFPLALAGPPPPPPPPPPHPHARIKLENPLDYGSAWAAAAAQCRYGDLASLHGAGAAGPGS
                                                                                                                                       -SPSVPAAD-----LAEYG--YPPPDGKEGPFAYGEFQSALKIKEEGVGLPAAPPPFLG
                                                                                                                                                                   GEAGAVAPYGYTRPPQGLAGQESDFTA------PDVWYPGGMVSRVPYPS----
                                                                                                                                                                                                                         ------PTCVKSEMGPWMDSYSGPY-GDMRLETARDHVLPIDYYFPPQKTC
                                                                                                                                                                                                                                                                                 564 LICGDEASGCHYGALTCGSCKVFFKRAAEGKQKYLCASRNDCTIDKFRRKNCPSCRLRKC
DTAEYSPFKGGYTKGLEGESLGCSGSAAAGSSGTLELPSTLSLYKSGALDEAAAYQSRDY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=91299755; PubMed=2069958; Schott D.R., Shyamala G., Schott der W., Parry G.; Schott D.R., Shyamala G., Schoelder W., Parry G.; Molecular cloning, sequence analyses, and expression of complementary DNA encoding murine progesterone receptor."; Biochemistry 30:7014-7020(1991).
                                                                                                               GSPSAAASSSWHTLFTAEEGQLYGPCGGGGGGGGGGG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-DEC-1992 (Rel. 24, Created)
01-DEC-1992 (Rel. 24, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
PROGESTERONE RECEPTOR (PR).
PROGESTOR NR3C3 OR PR.
Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         923 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN=129/SV;
MEDLINE=95100931; PubMed=7802637;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     [2]
SEQUENCE OF 1-9 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STANDARD;
                              -----GPGEGGT----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          910 ILSGKVKPIYFH 921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ||:| ||: ||
773 ILAGMVKPLLFH 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    [1]
SEQUENCE FROM N.A.
                                                                                   223 LHVPI-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRGR_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          000175;
                                                                                                                                          259
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEASTMQLLQQQQQEAVSEG-SSSGRAREASGAPTSSKDNYLGGTSTISDNAKELCKAVS 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              - EVPVAPMSRGPEGKAVDAGPGAPGPSQPRPGAP-------LWPGADSLNVAVK 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VSMGLGVEALEHLSPGEQLRGDCMYAPLLGVPPAVRPTPCAPLAECKGSLLDDSAGKSTE 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QQQQQQQQQQQETSPRQQQQQGEDGSPQAHRRGPTGYLVLDEEQQPSQPQSALECHPER 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C4-TYPE.
C4-TYPE.
C4-TYPE.
STEROID-BINDING.
ASP/GLU-RICH (ACIDIC).
MISSING (IN ISOFORM B').
QHNYLCA -> TISYHCS (IN ISOFORM B').
QHNYLCA -> TISYHCS (IN ISOFORM B').
MISSING (IN ISOFORM A' AND ISOFORM B').
MISSING (IN ISOFORM A' AND ISOFORM B').
E -> DO (IN REF. 2).
K -> A (IN REF. 2).
G -> A (IN REF. 2).
M -> I (IN REF. 2).
M -> I (IN REF. 2).
M -> I (IN REF. 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AND ISOFORM B')
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Receptor; Transcription regulation, DNA-binding; Nuclear protein; Zinc-finger; Steroid-binding; Alternative Splicing.

1 MODULATING, PRO-RICH.

NUCLEAR RECEPTOR-TYPE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              260;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24.8%; Score 1218; DB 1; Length 786; 33.4%; Pred. No. 6e-51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ----PGGGSLSKDCLDSVL-----DTFLAPAAHAAPWSLFGPEVP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            259;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EEEEEEPQQRE----EEEEEEEDRDCPSYR-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 33.4%; Pred. No. 6e-5
Matches 325; Conservative 128; Mismatches
                                                                                                                                                                                                                                                                                                                                                                         SMART; SM00430; HOLI; 1.
SMART; SM00399; ZnF_C4; 1.
PROSITE; PS00031; NUCLEAR_RECEPTOR; 1.
                                                                                                                                                                                                                                                         InterPro; IPR000536; Hormone_rec_lig
InterPro; IPR000128; Progest_rcptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ARPG-PEDASENRAPG------
                 JOINED.
                                                                      JOINED.
JOINED.
JOINED.
JOINED.
JOINED.
                                                                                                                                                                                                                                                                                    Interpro, IPR001628; zf-c4.
Pfam, PF00104; hormone_rec; 1.
Pfam, PF02161; Prog_receptor; 1.
Pfam, PF00105; zf-C4; 1.
PRINTS; PR00047; STROIDFINGER.
PRINTS; PR00544; PROGESTRONER.
                                             JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MM;
                                                       AAA49012.1;
                 AAA49011.1;
AAA49011.1;
AAA49011.1;
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58
480
489
577
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786
80
127
458
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                                                                                                                                                                                   PIR; A24312; A24312.
PIR; A24661; A24661.
PIR; S06284.
HSSP; P06401; 1A28.
TRANSFAC; T00698; -.
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642
786 AA;
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58
480
489
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                                                                                     M32726;
M32727;
M32728;
M32729;
                                                                                                                                           M32730;
M31104;
M31104;
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                                 M32729;
                                                          M32732;
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ZN_FING
ZN_FING
DOMAIN
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VARSPLIC
VARSPLIC
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CONFLICT
CONFLICT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CONFLICT
                                                                                                                                                           EMBL;
EMBL;
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EMBL;
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EMBL;
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EMBL;
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                                                                          EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                             the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    36;
                                                                                                                                 N
                                                                                                                                                                                                                                       -i- DOMAIN: COMPOSED OF THREE DOMAINS: A MODULATING N-TERMINAL DOMAIN, A DNA-BINDING DOMAIN AND A C-TERMINAL STEROID-BINDING DOMAIN.
                                                                                                                                                 THE REGULATION OF EUKARYOTIC GENE EXPRESSION AND AFFECT CELLULAR PROLIFERATION AND DIFFERENTIATION IN TARGET TISSUES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STEROID-BINDING.
NUCLEAR LOCALIZATION SIGNAL (POTENTIAL).
9415F1ED343BEE3F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GLLFPRSCRGPELPDGKTGDQOSLSDVEGAFSGVEATHREGGRNSRPPEKDSRLLDSVLD 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ---LVLD 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       291 ECKGSLLDDSAGKSTEDTAEYSPFKGGYTKGLEGESLG---CSGSAAAGSSGTLELPSTL 347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                         Biochem. Biophys. Res. Commun. 205:1093-1101(1994).
-!- FUNCTION: THE STEROID HORMONES AND THEIR RECEPTORS ARE INVOLVED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            86
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SMART; SM00430; HOLI; 1.
SMART; SM00399; ZnF_C4; 1.
PROSITE; PS00031; NUCLEAR_RECEPTOR; 1.
Receptor; Transcription regulation; DNA-binding; Nuclear protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7 KDPQVLHTSGASPSPPHIGSPLL-----ARLDSGPFQGSQHSDVSSVVSPIPISLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SLLTPSGPE---QSHAS----PPACEAITSWCLFGPELP----EDPRSVPATKGLLSP--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      174 PGLSSCSADLKDILSEASTMQLLQQQQQEAVSEGSSSGRAREASGAPTSSKDNYLGGTST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    234 ISDNAKELCKAVSVSMGLGVEALEHLSPGEQL---RGDCMYAPLLGVPPAVRPTPCAPLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ----KVLPKG-----PQPAA---
Hagihara K., Wu-Peng X.S., Funabashi T., Kato J., Pfaff D.W.;
"Nucleic acid sequence and DNase hypersensitive sites of the 5'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ONPGPRHPEAASAAPP--GASLLLLQQQQQQQQQQQQQQQQQQQQQQQQQETSP---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24.5%; Score 1205; DB 1; Length 923; 32.2%; Pred. No. 2.9e-50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ------HRRGPTGY--
                                                             region of the mouse progesterone receptor gene."; Biochem. Biophys. Res. Commun. 205:1093-1101(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MODULATING, PRO-RICH. NUCLEAR RECEPTOR-TYPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative 119; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C4-TYPE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C4-TYPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Progest_rcptor
                                                                                                                                                                                                              SUBCELLULAR LOCATION: NUCLEAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PF00104; hormone_rec; 1.
PF02161; Prog_receptor; 1.
PF00105; zf-C4; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRINTS; PR00047; STROIDFINGER.
PRINTS; PR00544; PROGESTRONER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Steroid-binding.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 188
99073 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; M68915; AAA39971.1; -. EMBL; U12644; AAA66067.1; -. PIR; A39596; A39596.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MGD; MGI:97567; Pgr.
InterPro; IPR000536; Hormone
InterPro; IPR000128; Progest
InterPro; IPR001628; zf-C4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P06401; 1A28.
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557
593
671
184
923 AA;
                                                                                                                                                                                                                                                                                                                                    NR3 SUBFAMILY.
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STRAIN=ROMANNOY; TISSUB-Uterus; Madigou T., Thieulant M.; Madigou T., Tiffoche C., le Gal F., Pelletier J., Thieulant M.; Submitted (SEP-1997) to the EMBL/GenBank/DDBJ databases.

-- FUNCTION: THE STEROID HORMONES AND THETR RECEPTORS ARE INVOLVED IN THE REGULATION OF EURARYOTIC GENE EXPRESSION AND AFFECT CELLULAR
---PLDYGSAWAAAAQCRYGDLA 414
                                                                                                                                             379
                                                                                                                                                                       ------GAVAPYGYTRPP-----QGLAGQESD 499
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                                                                                                                                                                                                                                                                  GPSSAAVSPASSSGSALECILYKAEAPPTQGSFAPLP-CKPPAAASCLLPRDSLPAAPGT 495
                                                                                                                                                                                                                                                                                               500 FTAPDVWYPGGMVSRVPYPSPTCVKSEMGPWMDSYSGPYGDMRLETARDHVLP--IDYYF 557
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                                                                                                                                                                                                                                                                                                                                                                                                                         NDCTIDKFRRKNCPSCRLRKCYEAGMTLGARKLKKLGNLKLQE--EGEA--SSTTSPTEE 658
                                                                            274 SRFSAPRVSLEQDSPIAPGRSPLATTVVDFIHVPILPLNHALLAARTRQLLEGESYDGGA
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Sukaryota: Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria: Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Bovidae; Caprinae; Ovis:
                                                                                                                                         334 TAGPFCPPRSPSAPSTPVPRGDFPDCTYPLEGDPKEDVFPL-
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Last annotation update)
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                                                -EAAAYQSRDYYNFPL-
                                                                                                           373 LAGPPPPPPP------HPHARIKLEN----
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EMMSEVIAAQLPKILAGMYKPLLFH 921
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(Rel. 36, Last sequ
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Job time: 386 sec

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
        SUBCELLULAR LOCATION: UNCLEAR.

DOMAIN: COMPOSED OF THREE DOMAINS: A MODULATING N-TERMINAL DOMAIN,
A DNA-BINDING DOMAIN AND A C-TERMINAL STEROID-BINDING DOMAIN.
SIMILARITY: BELONGS TO THE NUCLEAR HORMONE RECEPTORS FAMILY.
NR3 SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            559 POKTCLICGDEASGCHYGALTCGSCKVFFKRAAEGKQKYLCASRNDCTIDKFRRKNCPSC 618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       619 RLRKCYEAGMTLGARKLKKLGNLKLQEEGEASSTTSP----TEETTQKLTVSHIEGYE 672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          673 CQPIFLNVLEAIEPGVVCAGHDNNQPDSFAALLSSLNELGERQLVHVVKWAKALPGFRNL 732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       733 HVDDQMAVIQYSWMGLMVFAMGWRSFTNVNSRMLYFAPDLVFNEYRMHKSRMYSQCVRMR 792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     793 HLSQEFGWLQITPQEFLCMKALLLFSIIPVDGLKNQKFFDELRMNYIKELDRIIACKRKN 852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PTSCSRRFYQLTKLLDSVQPIARELHQFTFDLLIKSHMVSVDFPEMMAEIISVQVPKILS 912
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                       SMART; SM00430; HOLI; 1.
SMART; SM00430; LAF_C4: 1.
PROSITE; PS00031: NUCLEAR_RECEPTOR; 1.
Receptor; Transcription regulation; DNA-binding; Nuclear protein; Zinc-finger; Steroid-binding.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 22.7%; Score 1116; DB 1; Length 377; Best Local Similarity 55.2%; Pred. No. 1.9e-46; Matches 201; Conservative 73; Mismatches 84; Indels
 PROLIFERATION AND DIFFERENTIATION IN TARGET TISSUES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   42904 MW; 3141B65587F7493C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         MODULATING, PRO-RICH.
NUCLEAR RECEPTOR-TYPE.
C4-TYPE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STEROID-BINDING
                                                                                                                                                                                                                                                           InterPro; IPR000536; Hormone_rec_lig.
InterPro; IPR000128; Progest_rcptor.
InterPro; IPR00128; zf-4.
Pfam: PF001104; hormone_rec; 1.
Pfam: PF001161; Prog_receptor; 1.
Pfam: PF001105; zf-64; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C4-TYPE
                                                                                                                                                                                                                                 EMBL; Z66555; CAA91447.1; -. HSSP; P06401; 1A28.
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